

Utah Spinal Cord Injury and Brain Injury Rehabilitation Fund

Legislative Report SFY 2017 (7/1/16 to 6/30/17)

Utah Code 26-54-101

Recognizing that persons with traumatic spinal cord and brain injuries require intensive, focused, and specific rehabilitation, the Utah State Legislature established the Traumatic Spinal Cord Injury and Brain Injury Rehabilitation Fund (now known as the Spinal Cord Injury and Brain Injury (SCI and BI) Rehabilitation Fund) during the 2012 General Session as a restricted special revenue fund (Utah Code 26-54-101).

Outcomes

The SCI/TBI Rehabilitation Fund has made a positive impact on people living with traumatic spinal cord and brain injuries. During State Fiscal Year 2017, a total of **34 SCI/TBI Rehabilitation Fund clients received 1,198 sessions of physical therapy, 312 sessions of occupational therapy, and 437 sessions of speech therapy**. These services translate to significant potential cost savings (Table 1).

Table 1: SCI/TBI Rehabilitation Fund Potential Cost Savings

Outcome of services	Percent of clients*	Number of clients	Savings per client	Total savings
Improvement in quality of life (31)**	100%	31	Treatment of depression: \$9,240 - \$13,860	\$280,000
Improvement in transfer skills (25)**	96%	24	\$4,051 - \$8,103	\$97,224 - \$194,472
Improvement in ambulation (21)**	95%	20	Avoiding one fall: \$14,000	\$322,000
Improvement in wheelchair mobility (19)**	89%	17	Power chair: \$5,000 - \$17,000 Manual chair: \$11,000 - \$13,000	\$85,000 - \$289,000
Return to work and/or school (32)**	78%	25	\$17,824	\$445,600
Improvement in overall mobility and wellness participation (31)** Participation in wellness	70%	22	Avoiding re-hospitalization: \$45,770 - \$60,375 Disease management/	\$1,006,940 - \$1,328,250
program			quality of life savings: \$1,632	
Total per year			\$111,377 - \$132,794	\$2,686,982

^{*} Percent of clients who participated in indicated service and saw improvement

Blake's Story



Blake received a traumatic brain injury following a moped crash on February 2, 2015. Initially, he was given a very small chance of surviving, and little to no chance of being independent or walking again. Prior to his injury, Blake was working and attending school with plans for a career in agriculture. Blake was provided both physical and occupational therapy utilizing the SCI and BI Rehabilitation. He was discharged from therapy on January 4, 2017 walking without assistance, driving, and functionally independent. Since then, Blake has returned to school at Salt Lake Community College, works part-time at a local business, and has completed two internships, including one for the U.S. House of Representatives in Washington, D.C.

– Blake, age 23, Woods Cross, UT

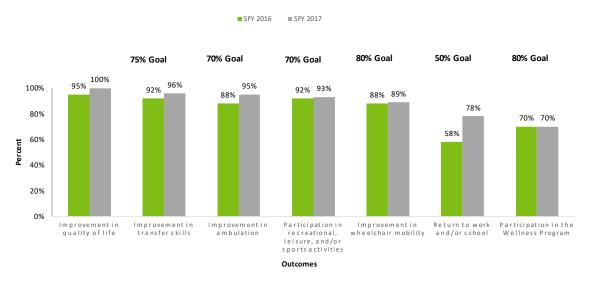
^{**}Total number individuals who applied for services, some of which may not have qualified for services.



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An increase in all outcomes was observed from 2016 to 2017, with the exception of participating in the Wellness Program. All outcomes exceeded the set goals (**Figure 1**).

Figure 1: Percent of Clients by Outcome, Utah, SFY2016-2017



Contractor Accomplishments

The University of Utah held a six-week spinal cord injury forum reaching approximately 360 people. They have established a traumatic brain injury support group and their equipment loaner program used in activity off daily living is at 95% capacity reaching approximately 75 people.

Neuroworx added an occupational therapist and have started expanding therapy services to rural areas via telemedicine. Neuroworx partners with the University of Utah and Rocky Mountain University doctor of physical therapy program to educate students about the SCI and BI Rehabilitation Fund and encourage students to refer qualified individuals to the SCI and BI Rehabilitation Fund.

Figure 2: Percent of Therapy Sessions by Type, Utah, SFY 2017

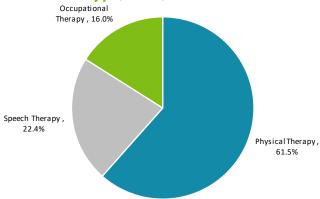


Figure 2 shows the number of SCI and BI therapy sessions in State Fiscal Year 2017. In addition, the SCI and BI Rehabilitation Fund contractors:

- Conducted 240 presentations reaching 1,900 healthcare professionals and members of the community.
- Completed 68 intake assessments and referred 34 qualified clients to alternative funding sources.

Brady's Story



Brady, a Utah State University student and football player, experienced a severe traumatic brain injury and a thoracic spinal cord injury from a car crash in May 2016. He was in of coma for several weeks, followed by nine months of hospitalization in a skilled care facility. Brady's outpatient insurance benefits allowed only 20 physical therapy visits per year, all of which were exhausted. On initial evaluation in March 2017, he was wheelchair dependent but showed potential for progress. After six months of therapy, provided by the SCI and BI Rehabilitation, he now walks independently with no assistive devices and has returned to work.

Brady, age 22, Riverton, UT



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Casey's Story

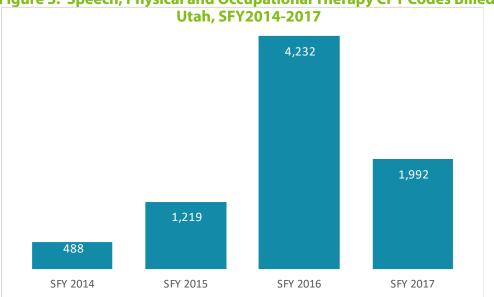


Casey sustained a severebrain injury February 2016 from a snowboarding injury. He was not wearing a helmet at the time. Casey was unable to initiate any self-care activities and was not participating in leisure activities with his friends or family. Casey was unable to coordinate his movements and his speech was intelligible less than 50% of the time. With the help from the SCI and BI Rehabilitation and hard work, Casey is now living a full, active life. He is jogging, participating in ski competitions, and biking with his father upwards of 15 miles. He is able to complete self-care activities independently, attend social events, and work part-time. He is also able to read to his nieces and nephews and participates in a mini-book club.

-Casey, age 32, Orem, UT

Figure 3 shows the number of speech, physical, and occupational therapy visits from State Fiscal Year 2014 to State Fiscal Year 2017. There was a 247.2% increase from 2015 to 2016 and a decrease of 52.9% from 2016 to 2017.

Figure 3: Speech, Physical and Occupational Therapy CPT Codes Billed,



Contractor Challenges

- Increased awareness and education about the SCI and BI Rehabilitation is needed among healthcare providers outside the Wasatch Front area.
- Regular evaluation of available resources for each client is a time consuming task, but it necessary to ensure that the SCI and BI Rehabilitation Fund is appropriately used.
- With access to Telemedicine along the Wasatch Front, there has been limited use of the SCI and BI Rehabilitation Fund by clients living outside the Wasatach Front.

James' Story



On June 19, 2016, James was in a motorcycle crash resulting in C7 quadriplegia. After a two month hospital stay, he was discharged to home in a power wheelchair. His insurance benefits only allowed 20 combined visits for all his outpatient therapy, which he quickly used up in his first month home. James was able to continue therapy thanks to the SCI and BI Rehabilitation. He has made consistent progress, and is currently able to walk with a walker. James recently returned to work part-time as a wood work designer, and had the opportunity to fly fish on the Weber River.

- James, age 41, Magna, UT



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Spinal Cord Injuries (SCI) in Utah

In Utah, in 2013:

- There were 76 Utah residents who were hospitalized with a traumatic SCI.
- Hospitalization costs that totaled more than \$7 million. This does not include the cost of care after hospitalization.
- The average length of a hospital stay for a SCI was eight days.
- Males accounted for three-fourths (76%) of all SCI-related hospitalizations.
- Falls (37%) were the leading cause of SCI hospitalizations followed by transportation (29%), and sports and recreation (21%).
- Utah adults aged 65 and older had the highest rates of SCI.

Traumatic Brain Injuries (TBI) in Utah

In Utah, in 2013:

- Every day 60 people are treated in an emergency department for a TBI, seven people are hospitalized, and at least one person dies from a TBI.
- Falls (46%) were the leading cause of TBI hospitalizations, followed by transportation-related injuries (23%) and sports and recreation (16%).
- TBI hospitalization rates increase with age; older adults aged 75+ had the highest rates of TBIs.
- TBIs resulted in nearly \$118 million in hospitalization charges in 2014; a 24.2% increase from \$95 million in 2013. This does not include costs for disability and long-term care, nor lost wages.
- The age-adjusted rate or TBI hospitalizations was 10.2 per 10,000. Males had a higher age-adjusted rate of 13.3 per 10,000 compared to females at 7.0 per 10,000.

SCI and BI Rehabilitation Fund (Utah Code 26-54-101)

The fund shall consist of:

- (a) gifts, grants, donations, or any other conveyance of money that may be made to the fund from private sources;
- (b) a portion of the impound fee as designated in Section 41-6a-1406; and
- (c) amounts as appropriated by the Legislature.

The SCI and BI Rehabilitation is administered by the executive director of the Utah Department of Health in consultation with the advisory committee created in Section 26-54-103. Funds shall be used to assist qualified IRC 501(c)(3) charitable clinics to provide rehabilitation services to individuals who have a traumatic spinal cord or brain injury that tends to be nonprogressive or nondeteriorating, including:

- (a) physical, occupational, and speech therapy; and
- (b) equipment necessary for daily living living.

During the 2017 General Session, amendments were made by the Utah State Legislature to include:

- 1. Addition of fees for off-road vehicle (\$1) and motorcycle (\$1) registrations collected by the Motor Vehicle Division under Subsection 21-22-8 (3) and Subsection 41-1a-1201(8) to support the Fund.
- 2. Changing the name from Traumatic SCI and BI Rehabilitation Fund to SCI and BI Rehabilitation Fund.
- 3. Increasing the advisory committee from five members to eight members by adding:
 - a. two survivors, or family members or a survivor of a traumatic spinal cord injury, appointed by the governor; and
 - b. one traumatic brain injury or spinal cord injury professional appointed by the governor who, at the time of appointment and throughout the professional's term on the committee, does not receive a financial benefit from the fund.

Members of the SCI and BI Rehabilitation advisory committee met four times during SFY 17 and conducted business according to the Open and Public Meetings Act. Minutes were posted at **pmn.utah.gov**. Changes to the committee will be implemented starting January 1, 2018.